Raceway Solutions™

Conventional Underfloor Duct

Multi-Compartment Conventional Duct Saves Time and Money in Your In-Slab Wire Management System

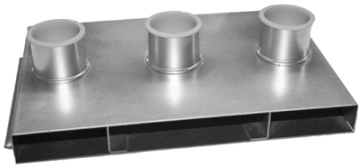
The Raceway Solutions Conventional Underfloor Duct System is an in-slab wire management product for delivering power, voice and data services to numerous point of sale locations or office workstations. The Raceway Solutions Conventional Underfloor Duct System is uniquely designed with multiple compartments, allowing unlimited design options and fantastic cost savings in labor and materials from other single-compartment systems.

Here is how Raceway Solutions Conventional Underfloor Duct works for you:

- Five designs available, providing the most complete offering in the industry.
- Multi-compartment duct, drastically reducing installation and material costs.
- Four insert heights, expanding the design options of 1", 1½", 2" and 3" sizes.
- Inclusive tile trim in the junction box, providing the installer the on-site option of using the trim or leaving it recessed.
- Combination duct couplers and supports, reducing material and labor costs using the same part for two functions.
- Meets or exceeds UL 884 specifications, assuring a fully approved system from one manufacturer.

Matched with our strong national distribution and complete technical and applications support, the Raceway Solutions Conventional Underfloor Duct system is the perfect solution for your underfloor wire management needs, and at an affordable price. As a part of our complete wire management and components offering, Raceway Solutions Conventional Underfloor Duct is perfect for:

- Supermarkets
- Retail Facilities
- Casinos
- Office Buildings
- Airports
- Institutional Facilities



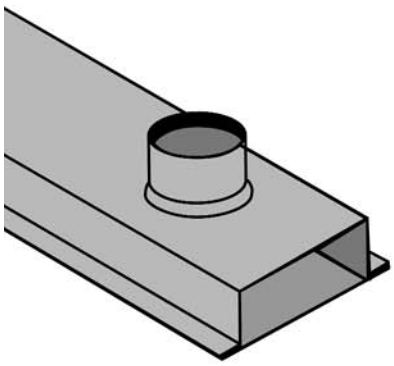
Catalog Number System

203 - 2 - 12

# of Cells	Insert Height	Insert Spacing
1 = Single Cell	B = Blank	
2 = Two Cell	1 = 1" Height	12 & 24 Standard
3 = Three Cell	15 = 1½" Height	6, 18, & 36 (optional)
4 = Four Cell	2 = 2" Height	
	3 = 3" Height	

Raceway Solutions™

Conventional Underfloor Duct

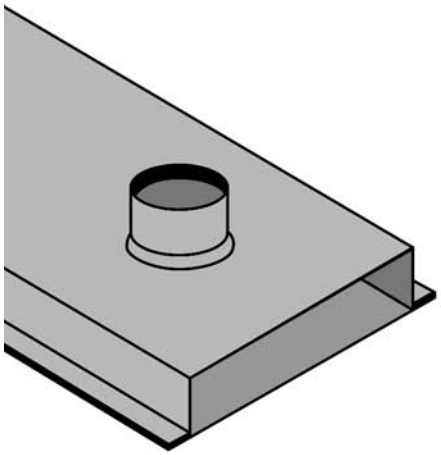


Standard Single Compartment

Standard Single Compartment Duct

Cat.No.	Duct Width	Duct Depth	Insert Spacing
201-B	3¼"	1½"	No Inserts
201-3-24	3¼"	1½"	3" High Inserts 24"o.c.
201-2-24	3¼"	1½"	2" High Inserts 24"o.c.
201-15-24	3¼"	1½"	1½" High Inserts 24" o.c.
201-1-24	3¼"	1½"	1" High Inserts 24" o.c.
201-3-12	3¼"	1½"	3" High Inserts 12" o.c.
201-2-12	3¼"	1½"	2" High Inserts 12" o.c.
201-15-12	3¼"	1½"	1½" High Inserts 12" o.c.
201-1-12	3¼"	1½"	1" High Inserts 12" o.c.

Material: 14 gauge pre-galvanized steel with 668 coating **Presets:** Die-cast zinc
UL Listing No.884

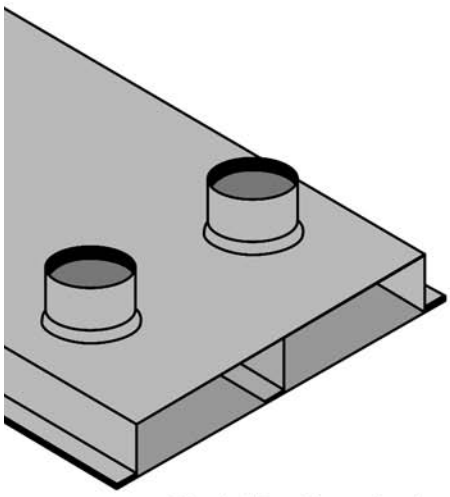


Wide Single Compartment

Wide Single Compartment Duct

Cat.No.	Duct Width	Duct Depth	Insert Spacing
201W-B	5⅞"	1½"	No Inserts
201W-3-24	5⅞"	1½"	3" High Inserts 24" o.c.
201W-2-24	5⅞"	1½"	2" High Inserts 24" o.c.
201W-15-24	5⅞"	1½"	1½" High Inserts 24" o.c.
201W-1-24	5⅞"	1½"	1" High Inserts 24" o.c.
201W-3-12	5⅞"	1½"	3" High Inserts 12" o.c.
201W-2-12	5⅞"	1½"	2" High Inserts 12" o.c.
201W-15-12	5⅞"	1½"	1½" High Inserts 12" o.c.
201W-1-12	5⅞"	1½"	1" High Inserts 12" o.c.

Material: 14 gauge pre-galvanized steel with 668 coating **Presets:** Die-cast zinc
UL Listing No.884



Standard Two Compartment

Standard Two Compartment Duct

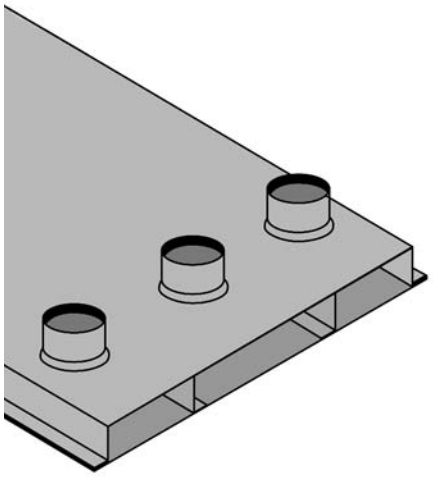
Cat.No.	Duct Width	Duct Depth	Insert Spacing	Compartment Width
202-B	10"	1½"	No Inserts	2 @ 5"
202-3-24	10"	1½"	3" High Inserts 24" o.c.	2 @ 5"
202-2-24	10"	1½"	2" High Inserts 24" o.c.	2 @ 5"
202-15-24	10"	1½"	1½" High Inserts 24" o.c.	2 @ 5"
202-1-24	10"	1½"	1" High Inserts 24" o.c.	2 @ 5"
202-3-12	10"	1½"	3" High Inserts 12" o.c.	2 @ 5"
202-2-12	10"	1½"	2" High Inserts 12" o.c.	2 @ 5"
202-15-12	10"	1½"	1½" High Inserts 12" o.c.	2 @ 5"
202-1-12	10"	1½"	1" High Inserts 12" o.c.	2 @ 5"

Material: 14 gauge pre-galvanized steel with 668 coating **Presets:** Die-cast zinc
UL Listing No.884

For different compartment spacing consult factory.

Raceway Solutions™

Conventional Underfloor Duct



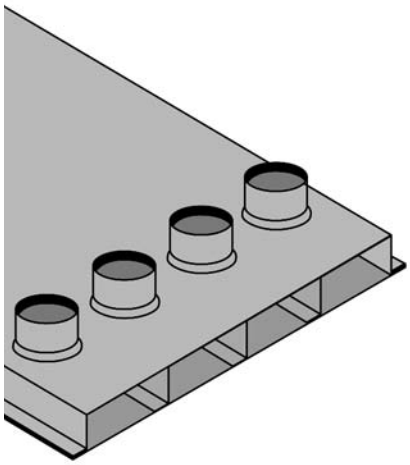
Standard Three Compartment Duct

Standard Three Compartment Duct

Cat.No.	Duct Width	Duct Depth	Insert Spacing	Compartment Width
203-B	15"	1½"	No Inserts	2 @ 4" – 1 @ 6¾"
203-3-24	15"	1½"	3" High Inserts 24" o.c.	2 @ 4" – 1 @ 6¾"
203-2-24	15"	1½"	2" High Inserts 24" o.c.	2 @ 4" – 1 @ 6¾"
203-15-24	15"	1½"	1½" High Inserts 24" o.c.	2 @ 4"– 1 @ 6¾"
203-1-24	15"	1½"	1'' High Inserts 24" o.c.	2 @ 4"– 1 @ 6¾"
203-3-12	15"	1½"	3" High Inserts 12" o.c.	2 @ 4"– 1 @ 6¾"
203-2-12	15"	1½"	2" High Inserts 12" o.c.	2 @ 4"– 1 @ 6¾"
203-15-12	15"	1½"	1½" High Inserts 12" o.c.	2 @ 4"– 1 @ 6¾"
203-1-12	15"	1½"	1" High Inserts 12" o.c.	2 @ 4"– 1 @ 6¾"

All duct standard 10' lengths.
Material: 14 gauge pre-galvanized steel with 668 coating **Presets:** Die-cast zinc
UL Listing No. 884

For different compartment spacing consult factory.

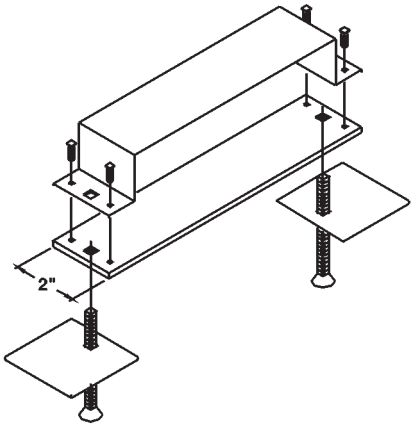


Standard Four Compartment Duct

Standard Four Compartment Duct

Cat.No.	Duct Width	Duct Depth	Insert Spacing	Compartment Width
204-B	15"	1½"	No Inserts	4 @ 3⅝"
204-3-24	15"	1½"	3" High Inserts 24" o.c.	4 @ 3⅝"
204-2-24	15"	1½"	2" High Inserts 24" o.c.	4 @ 3⅝"
204-15-24	15"	1½"	1½" High Inserts 24" o.c.	4 @ 3⅝"
204-1-24	15"	1½"	1" High Inserts 24" o.c.	4 @ 3⅝"
204-3-12	15"	1½"	3" High Inserts 12" o.c.	4 @ 3⅝"
204-2-12	15"	1½"	2" High Inserts 12" o.c.	4 @ 3⅝"
204-15-12	15"	1½"	1½" High Inserts 12" o.c.	4 @ 3⅝"
204-1-12	15"	1½"	1" High Inserts 12" o.c.	4 @ 3⅝"

All duct standard 10' lengths.
Material: 14 gauge pre-galvanized steel with 668 coating **Presets:** Die-cast zinc
UL Listing No. 884



Coupler/Supports

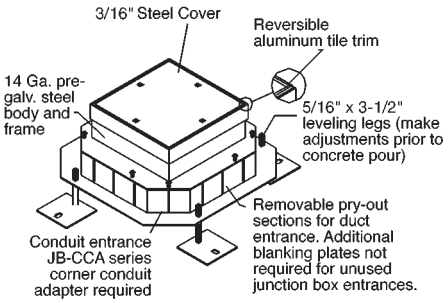
Cat.No.	Description
201-DCS	Standard Single Cell Duct
201W-DCS	Wide Single Cell Duct
202-DCS	Two Cell Duct
203-DCS	Three and Four Cell Duct

Material: 14 gauge pre-galvanized steel with 668 coating
UL Listing No. 668

Raceway Solutions duct coupler/supports provide a means of not only coupling duct sections together but also supporting the duct sections. It is recommended that a support/coupler be used every 5' of duct run.

Raceway Solutions™

Conventional Underfloor Duct



Raceway Solutions Underfloor Duct Junction Boxes offer several labor saving and design advantages. The boxes are manufactured with a concrete ring approximately ¼" higher than the corresponding duct to allow for the proper amount of concrete fill over the duct inserts. Also, the boxes are made from durable 14 ga. pre-galvanized steel and come with a reinforced 3/16" thick steel cover. In addition, our junction boxes include a built-in tile trim which can be easily removed, flipped over and reinstalled when the surrounding floor tile is installed. Our junction boxes are also manufactured with removable duct and corner entrance plugs which are easily removed for duct and corner conduit adapter entrance.

Note: Please consult factory for information about a heavy duty junction box. A heavy duty junction box with round brass access trim is also available.

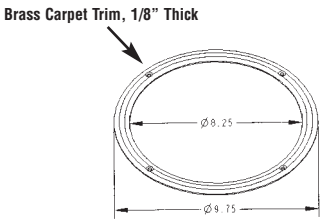
Junction Boxes

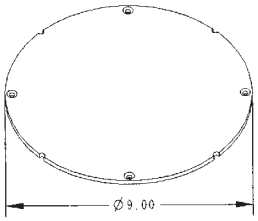
Cat. No.	Description	Inserts
201-JB-4	For Standard Single Cell Blank Duct	For 4" Afterset Only
201-JB-3	For Standard Single Cell Blank Duct	For 3" Afterset or Preset
201-JB-2	For Standard Single Cell Duct	For 2" Preset or Afterset
201-JB-15	For Standard Single Cell Duct	For 1½" Preset or Afterset
201-JB-1	For Standard Single Cell Duct	For 1" Preset or Afterset
201W-JB-4	For Wide Single Cell Blank Duct	For 4" Afterset Only
201W-JB-3	For Wide Single Cell Blank Duct	For 3" Afterset or Preset
201W-JB-2	For Wide Single Cell Duct	For 2" Preset or Afterset
201W-JB-15	For Wide Single Cell Duct	For 1½" Preset or Afterset
201W-JB-1	For Wide Single Cell Duct	For 1" Preset or Afterset
202-JB-4	For Standard Two Cell Blank Duct	For 4" Afterset Only
202-JB-3	For Standard Two Cell Blank Duct	For 3" Afterset or Preset
202-JB-2	For Standard Two Cell Duct	For 2" Preset or Afterset
202-JB-15	For Standard Two Cell Duct	For 1½" Preset or Afterset
202-JB-1	For Standard Two Cell Duct	For 1" Preset or Afterset
203-JB-4	For Standard Three Cell Blank Duct	For 4" Afterset Only
203-JB-3	For Standard Three Cell Blank Duct	For 3" Afterset or Preset
203-JB-2	For Standard Three Cell Duct	For 2" Preset or Afterset
203-JB-15	For Standard Three Cell Duct	For 1½" Preset or Afterset
203-JB-1	For Standard Three Cell Duct	For 1" Preset or Afterset
204-JB-4	For Standard Four Cell Blank Duct	For 4" Afterset Only
204-JB-3	For Standard Four Cell Blank Duct	For 3" Afterset or Preset
204-JB-2	For Standard Four Cell Duct	For 2" Preset or Afterset
204-JB-15	For Standard Four Cell Duct	For 1½" Preset or Afterset
204-JB-1	For Standard Four Cell Duct	For 1" Preset or Afterset

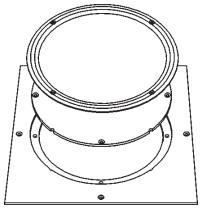
Material:14 gauge pre-galvanized steel with 668 coating
UL Listing No. 668

Round Cover Option for Junction Box

Round Cover with Brass Carpet Trim



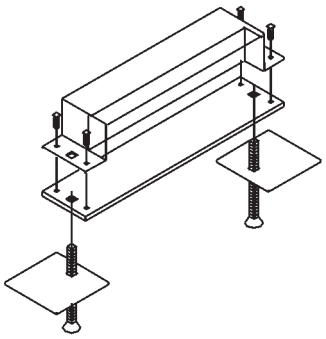




Junction Box Catalog Numbers
Carpet: 20_-JB*-RCB *=Insert Height

Raceway Solutions™

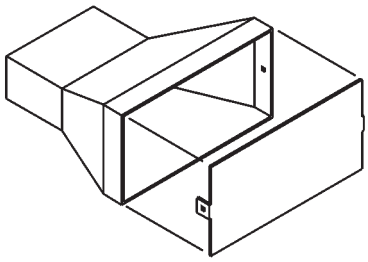
Conventional Underfloor Duct



End Cap/Supports

Cat.No.	Description
201-ECS	Standard Single Cell Duct
201W-ECS	Wide Single Cell Duct
202-ECS	Two Cell Duct
203-ECS	Three and Four Cell Duct

Raceway Solutions End Cap/Supports provide a means of supporting and closing unused duct ends.
Material: 14 gauge pre-galvanized steel with 668 coating
UL Listing No. 668

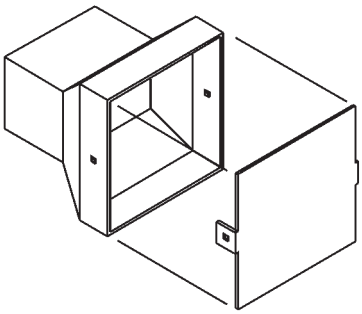


Conduit Adapters

Cat.No.	Description
201-UCA	Standard Single Cell Duct
201W-UCA	Wide Single Cell Duct
202-UCA	Two Cell Duct
203-UCA	Three Cell Duct
204-UCA	Four Cell Duct

Raceway Solutions End Conduit Adapters are provided with a removable blank cover which is field punched for the required combination of conduits. Conduit adapters for multi-compartment duct are supplied with interior barriers to maintain separation between services.

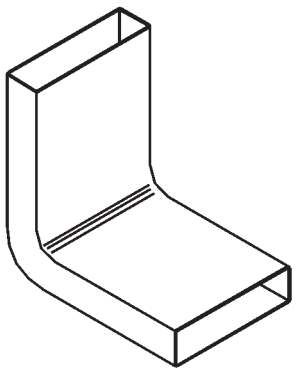
Material: 14 gauge pre-galvanized steel with 668 coating
UL Listing No. 668



Junction Box Corner Conduit Adapters

Cat.No.	Description
JB-CCA-B	With Removable Blank Cover
JB-CCA-1/2	With pre-punched ½" k.o.
JB-CCA-3/4	With pre-punched ¾" k.o.
JB-CCA-1	With pre-punched 1" k.o.
JB-CCA-1-1/2	With pre-punched 1½" k.o.
JB-CCA-2	With pre-punched 2" k.o.

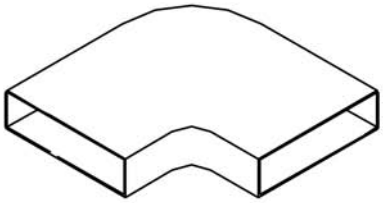
Features a 16 gauge galvanized steel removable cover that may be field punched for required conduit.
Material: 14 gauge pre-galvanized steel with 668 coating
UL Listing No. 668



Vertical Risers

Cat.No.	Description
201-VEL	Standard Single Cell Duct
201W-VEL	Wide Single Cell Duct
202-VEL	Two Cell Duct
203-VEL	Three Cell Duct
204-VEL	Four Cell Duct

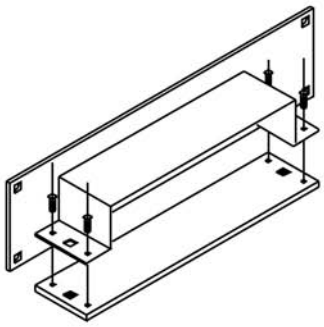
Material: 14 gauge pre-galvanized steel with 668 coating
UL Listing No. 668



Horizontal Elbows – 90 °

Cat.No.	Description
201-HB90	Standard Single Cell Duct
201W-HB90	Wide Single Cell Duct
202-HB90	Two Cell Duct
203-HB90	Three Cell Duct
204-HB90	Four Cell Duct

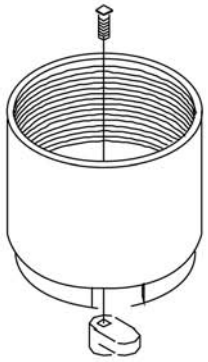
Material: 14 gauge pre-galvanized steel with 668 coating
UL Listing No. 668



Duct Cabinet Connectors

Cat.No.	Description
201-DCC	Standard Single Cell Duct
201W-DCC	Wide Single Cell Duct
202-DCC	Two Cell Duct
203-DCC	Three and Four Cell Duct

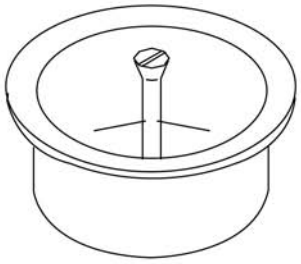
Material: 14 gauge pre-galvanized steel with 668 coating
UL Listing No. 668



Afterset Inserts – 2" IPS Thread

Cat.No.	Height
DAI-1	1"
DAI-2	2"
DAI-3	3"
DAI-4	4"

Material: Zinc die cast



Marker Caps

Cat.No.	Description
DMC-Z	Insert marker cap with zinc screw
DMC-B	Insert marker cap with brass screw

Material: 14 gauge pre-galvanized steel with 668 coating
UL Listing No. 668

Reducing Bushings

Cat.No.	Description
RB-162	2" to ¾"
RB-163	2" to 1"

Material: Steel, Zinc Plated
UL Listing No. E-1275

Service Head Fittings

Raceway Solutuions service fittings provide above-floor service for power, communications and data. A variety of service fitting designs are available.

PSF-10-DR

PSF-10 Series

- ***Brushed aluminum finish.***
- ***Low profile design.***
- ***Furnished with 1" conduit nipple.***

PSF-20-2DR

PSF-20 Series

- ***Brushed aluminum finish.***
- ***Interchangeable face plates.***
- ***Furnished with 1" conduit nipple for direct screw-threading into a floor box plate with 1" cover opening.***

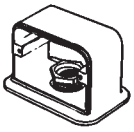
Service Fittings for Power

Cat. No.	Description	Finish	Dimensions W	D	H	Wt. (lbs.)
PSF-10-DR	Furnished with one 15 amp, 125 volt, 3-wire NEMA duplex receptacle	Brushed Aluminum	4⅜"	3"	2⅝"	1.6
PSF-10	Same as PSF-10-DR above less duplex receptacle	Brushed Aluminum	4⅜"	3"	2⅝"	1.5
PSF-20-2DR	Furnished with two back to back 15 amp, 125 volt, 3 wire NEMA duplex receptacles	Brushed Aluminum	5"	3⅜"	3"	1.38
PSF-20	Same as PSF-20-2DR less duplex receptacles	Brushed Aluminum	5"	3⅜"	3"	1.25
PSF-21	Furnished with cover plate to accommodate one 30 or 50 amp, 240 volt, 3 wire receptacle and blank cover	Brushed Aluminum	5"	3⅜"	3"	1.25

PSF-20 Series Component Parts

PSF-20-BASE	Standard above floor service fitting base only.
PSF-20-TELEDVP	Device plate for PSF-20 with 1" dia. hole.
PSF-20-DUPDVP	Device plate for PSF-20 for duplex.
PSF-20-BLDVP	Blank device plate for PSF-20.
PSF-20-DVP139	Device plate for PSF-20 with 1$^{13}/_{32}$" dia. hole.

UL Listing No. 514A



PSF-20-Base

Blank Plate PSF-20-BLDVP

Telephone Plate, 1" Hole PSF-20-TELEDVP

Single Receptacle Plate, 1.39" Hole PSF-20-DVP139

Single Receptacle Plate, 1.60" Hole PSF-20-DVP160

Duplex Receptacle Plate PSF-20-DUPDVP

CMSF-10

- ***Brushed aluminum finish***
- ***Low profile design***
- ***Furnished with 1" conduit nipple***

Service Fittings for Communications and Data

Cat. No.	Description	Finish	Dimensions W	D	H	Wt. (lbs.)
CMSF-10	¾ "x 1⅛" bushed opening for telephone or computer	Brushed Aluminum	4⅜"	3⅛"	2⅝"	1.5

UL Listing No. 514A

Conventional Underfloor Duct Specifications

Part 1 -GENERAL

1.1 SUMMARY

Work under this section includes all labor and materials which are required for the completion of infloor distribution system, as shown on drawings and as specified. The Conditions of the Contract apply to this section as fully as if repeated herein.

1.1.1 Work includes, but is not necessarily limited to the following principal items.

a.Raceway Solutions metal underfloor raceway.

b.Related accessories, to include junction boxes,supports, closures, and all other items necessary to the Raceway Solutions system.

1.2 REFERENCES: The editions of specifications and standards referenced herein, published by the following organizations, apply to the work only to the extent specified by the reference.

a. Underwriters Laboratories,Inc. (UL Standard 884)

b. National Electric Code (NFPA No. 70)

1.3 QUALITY ASSURANCE:

1.3.1 Standards:

.1 The material, products and equipment specified in this section establish a standard of quality of required function, dimension, appearance and quality to be met by any proposed substitution.

.2 The manufacturer and installer shall demonstrate a minimum of five years experience with this type of underfloor duct system.

1.4 SUBSTITUTIONS:

1.4.1 No substitution will be considered unless written request for approval has been submitted by the bidder and has been received by the Architect at least ten (10) days prior to the date for receipt of bids.

1.4.2 Each such request shall include the name of the materials or equipment for which it is to be substituted and a complete description of the proposed substitute including drawings, cuts, mock-ups, performance and test data, compliance with codes and approvals and any other information necessary for evaluation.

1.5 SUBMITTALS:

1.5.1 Manufacturer's Data: Submit manufacturer's specifications and installation instructions for each product specified. Include manufacturer's certification as may be required to show compliance with these specifications. Indicate by transmittal form that a copy of each instruction has been distributed to the installer.

1.5.2 Shop Drawings:

.1 Submit detailed drawings showing layout of all Raceway Solutions raceways, junction boxes, and accessories as necessary for the proper installation of the infloor system.

PART 2 -PRODUCTS

2.1 RACEWAY SOLUTIONS RACEWAY

2.1.1 Typical module as shown on drawings consisting of 1, 2, 3 or 4 compartment raceways.

2.1.2 Materials: Raceway Solutions duct shall be fabricated from 14 (2mm) gauge steel.

2.1.3 Capacity: Raceway Solutions 201 Series Raceway shown have outside dimensions of 3½" x 1½".
201W Series: 5⅞" x 1½"
202 Series: 10" x 1½"
203 Series: 15" x 1½"
204 Series: 15" x 1½"

2.1.4 Raceway Solutions Fabrication:

.1 The Raceway Solutions duct units shall be manufactured in maximum lengths of 10' (3048 mm).

.2 Protective Coating: The Raceway Solutions duct shall be coated for corrosion resistance.

2.1.5 Preset Inserts:

.1 Preset inserts shall be mounted 12" (304.8 mm) or 24" (609.6 mm) on center on the Raceway Solutions duct raceway.

.2 The preset inserts shall be made of zinc die cast, and shall be a minimum of 1" (25.4 mm) over top of the duct.

.3 The preset inserts will have an inside diameter of 2" (50.8) IPS capable of housing 2" (50.8 mm) conduit.

.4 The preset inserts shall have a beveled base which is expanded into the duct to form a continuous passageway.

.5 Each preset insert will have a removable cap that is recessed to receive concrete.

2.1.6 Junction Boxes:

.1 The junction boxes shall have openings in all 4 corners for conduit adapters.

.2 The junction box shall have pre-pour adjustment (vertical and angular) via 4 leveling legs.

.3 The junction box shall be supplied with integral aluminum tile trim.

.4 All duct and conduit connections shall be completely grounded via a grounding screw.

.5 Junction box shall contain inclusive tile trim.

2.2 ACTIVATIONS

2.2.1 Supply activation assemblies as requested.

2.2.2 The manufacturer shall supply the necessary pieces to transition from the 2" (50.8 mm) I.P.S. preset to the service fitting upon request.

2.2.3 Activation assemblies shall be Raceway Solutions PSF-20 series, PSF-10 series, CMSF-10 series HELP

2.2.4 Activation assemblies shall be pedestal style (as specified).

3.1 RACEWAY SOLUTIONS UNDERFLOOR DUCT INSTALLATION

3.1.1 Install distribution raceway system and accessories in accordance with the manufacturer's recommendation, installation instructions, the final installation drawings and as herein specified. Electrical module lines shall be laid out on the concrete base in each building bay and the raceway units shall be located in strict accordance with the electrical drawings in order to

maintain the electrical module spacing.
3.1.2 Place raceway system on the supporting framework and adjust to final position with proper end bearing and alignment at the butt joints before permanent fastening. All joints shall be secured with grounding screws.
3.1.3 Permanently fasten the raceway supports to the supporting framework with screws and nails. Spacing between support shall not exceed 5'-0" (1524 mm).
3.1.4 The raceway supports and the raceway distribution system shall be adjusted so the top of the presets are 1/8 (3.2 mm) inch to 3/8 (9.5 mm) inch below the screed line.
3.1.5 Marker screw caps shall be used in place of the standard insert caps at the following locations: (a) in each insert adjacent to a junction box; (b) in inserts on each side of a permanent wall, and (c) in the last insert in each run of duct.
3.1.6 Do not use the installed raceway system for working platforms or walkways.
3.1.7 After placing of concrete fill and before wiring is installed, remove debris and other foreign materials.
3.1.8 If moisture is present, remove cover plates as necessary to allow air circulation.
3.2 FIELD QUALITY CONTROL:
3.2.1 Field testing and inspection are specified in Section 01410.
3.2.2 Protection: Protect installation of floor system from damage. Do not allow equipment or heavy traffic over Raceway Solutions duct during construction period, without first installing ramps over the duct. Ramps shall be designed so that imposed loads are not transferred to Raceway Solutions duct. Replace components of the systemwhich are damaged during construction, at no cost to the Owner.
3.2.3 The installed Raceway Solutions raceway system shall be U.L. Listed Under Standard 884 and shall comply with Article 354 of the National Electric Code.
3.3 CONCRETE PLACEMENT:
3.3.1 Concrete topping shall be as indicated on the drawings and as specified under Section 03300. Concrete containing chlorides from any source shall not be placed over infloor units.
3.3.2 Before concrete placement, make a final inspection of the entire Raceway Solutions system. Any gaps in the system shall be sealed to prevent mortar or concrete from entering.
3.3.3 Reinforced concrete design shall be in accordance with American Concrete Institute Specifications for Structural Concrete for Buildings (ACI301-72) and ACI Building Code Requirements for Reinforced Concrete (ACI1318-83). Concrete placement shall follow proper and accepted industry practice and be in accordance with ACI Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete (ACI304-73), Concrete must be vibrated at all headers, junction boxes, and raceway to insure that the concrete completely fills underneath the Raceway Solutions system. However, it is imperative that the concrete not be over vibrated. Over vibration causes segregation of materials in the concrete mix which in turn leads to weakening of concrete strength.
3.3.4 Shrinkage and temperature reinforcement above the Raceway Solutions system shall be in accordance with ACI318-83. Care shall be taken during concrete placement and, in particular, during concrete vibration, to prevent rising of top reinforcement within the slab.
3.3.5 Contractors placing the concrete shall carefully hand finish a minimum of 24" (609.6 mm) adjacent to junction box access openings, so that the top of finished concrete and junction box access units are flush.

PART 4 -MANUFACTURER:
4.1 Acceptable Brands:
a. Raceway Solutions by Dennis Filges Co. Inc..
b.Other suppliers must submit 10 days prior for approval.

Raceway Solutions™

Conventional Underfloor Duct Specifications

	4.875 Sq.In.Compartment				
Conductor	**RHW/RHH**	**TW**	**THW**	**THWN**	**XHHW**
14	75	140	93	201	140
12	55	108	75	147	108
10	45	80	59	92	80
	5.4375 Sq.In.Compartment				
Conductor	**RHW/RHH**	**TW**	**THW**	**THWN**	**XHHW**
14	84	156	104	224	156
12	62	120	84	164	120
10	50	90	65	103	99
	6.0 Sq.In.Compartment				
Conductor	**RHW/RHH**	**TW**	**THW**	**THWN**	**XHHW**
14	92	173	115	247	173
12	68	133	92	180	133
10	55	99	72	114	99
	7.5 Sq.In.Compartment				
Conductor	**RHW/RHH**	**TW**	**THW**	**THWN**	**XHHW**
14	115	216	144	309	216
12	85	166	115	226	166
10	69	123	90	142	123
	8.8125 Sq.In.Compartment				
Conductor	**RHW/RHH**	**TW**	**THW**	**THWN**	**XHHW**
14	136	254	169	363	254
12	100	195	136	265	195
10	81	145	106	167	145
	10.125 Sq.In.Compartment				
Conductor	**RHW/RHH**	**TW**	**THW**	**THWN**	**XHHW**
14	156	291	194	418	291
12	115	224	156	305	224
10	93	167	122	192	167

Number of allowable conductors at 40% fill.

Estimating Raceway Solutions Conventional Underfloor Duct

Step 1: Determine the total number of feet of duct you'll need for your space.

Step 2: Calculate the number of pieces of duct necessary by dividing the total number of feet by 10. Always round up to the next whole number.

Example: Total length of duct = 226 feet
226'/10' = 22.6 pcs.Total number of pieces required for the job is 23.

Step 3: Determine number of junction boxes and accessories necessary for the system.

- Duct Couplers/Supports – one for every 5' of duct.
- Duct End Cap/Supports – close off unused duct ends.
- Conduit Adapters – enters either the junction box or duct end.
- Afterset inserts – used primarily with blank duct.
- Service heads – PSF - series, CMSF-series or none.